



MIDWIFERY STUDENTS EXPERIENCED DYSMENORRHOEA AND THEIR APPLICATIONS TO COPE WITH IT

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Abstract

The study was conducted as a descriptive to determine the dysmenorrhoea status and coping practices of midwifery students who were enrolled in Atatürk University Faculty of Health Sciences.

The universe of this study included 201 midwifery students. The choice of sampling wasn't done. 155 students who are ready on the day when the research was done who received education at the Faculty of Health Sciences in the academic year of 2012-2013 and accept to participate in the study were included in the study. The data were collected by means of question form prepared by the researcher using information in literature.

At the end of the research we found that 93% had dysmenorrhea, in 32.3% dysmenorrhoea was starting at beginning of menstruation and 46.5% goes on first day of menstruation. It was determined that the most of the complaints about dysmenorrhoea was abdominal pain (45.8%). Also in the distribution of the students' menstrual complaints, 44.5% experienced back pain, 45.8% experienced abdominal pain, 42.6% experienced irritability, 40.6% experienced breast sensitivity/pain every cycle. 50.3% Bed resting was coping practice with dysmenorrhoea. According to the statistical analyze; experiencing dysmenorrhoea has been not affected by age and family history ($p>0.05$) however affected by class of students ($p<0.05$).

The students' were lived premenstrual symptoms and dysmenorrhoea, and they had insufficient knowledge of procedures for relief. In order to decrease the negative effects of PMS and dysmenorrhoea, it is recommended to create awareness about PMS and school health nurses or health professionals in the health care institutions to act as a consultant and educator in the support of students about PMS and dysmenorrhoea.

Keywords: Dysmenorrhoea, midwifery students, cope with

Introduction

World Health Organization (WHO) defines the period between ages of 10-19 years as adolescent period and the period between ages of 15-24 years as youth period. This period was described as transition period, from beginning of secondary sex character to sexual maturity, developing from childhood to adulthood, from socio-economical dependence to semi dependence (1,2). The youth period is not an intermediate period passing rapidly between childhood and adulthood. It is a long period when young people search their position in public, physical, psychological, and social maturity (3).

Adolescence is a period when intensive physiological, metabolic, psychological changes are observed. Rapid developments of secondary sex characters experienced in this period bring along numerous problems. Especially problems of menstruation period faced by

beginning of menarche in young girls stand out as most important problems of adolescent period (2).

Even though menstruation is a physiological phenomenon, negativities, disorders, and lack of knowledge experienced in this period may cause to worsen sexual and reproductive health of individual (4). Many studies report that mostly dysmenorrhoea, Premenstrual Syndrome (PMS), amenorrhoea, and abnormal uterus bleeding among menstrual problems are experienced (5). According to results of the study conducted, dysmenorrhoea known as painful menstruation has been reported as one of the most common gynecological problems within menstrual problems (2,6,7). In a study conducted by Balbi et al. (2000), dysmenorrhoea rate among women was determined as 85 % (8). A study conducted by Çıtak et al. (2002) reported that totally 85.7% of girls had dysmenorrhoea as 38.6% in every cycle, and 48.9% occasionally (2). Oskay and Şahin (2004) were determined dysmenorrhoea rate in women as 83.1% (9).

Dysmenorrhoea is case of painful menstruation. Pain in dysmenorrhoea is like cramps and colic, and mostly observed as stomach ache and low back pain (2,6). Pain level of dysmenorrhoea can be much enough to hinder daily life of individual, or slight. Thus, dysmenorrhoea is a situation required to be examined in early period since it causes to decrease labor productivity and quality of work of the individual, as well as it has adverse effects on self-confidence, social relationships, and class attendance of adolescent girl (2).

Determining premenstrual problems that midwifery students having significant opportunities due to their social roles and experiencing problems of youth period, determining the dysmenorrhoea rate and methods to cope with dysmenorrhoea, and specifying the sources to get information about the subject will provide basic information for use of efficient methods to cope with. Increasing awareness of young girls having midwifery education in this subject, and providing them to have correct practices about coping methods will enable to train broader communities via peer training.

This descriptive study was conducted in order to determine the states of students, who received education at Atatürk University Faculty of Health Sciences Department of Midwifery, to experience dysmenorrhoea and their practices to cope with dysmenorrhoea.

Material And Method

This is a descriptive study. The population of the study consisted of 201 students receiving education at Atatürk University Faculty of Health Sciences Department of Midwifery in the academic year of 2012-2013. Whole population was included as the sample

group. However, the study group consisted of 155 students because 46 students were absent on the day when the study was conducted or they did not want to answer. Prior to implementation, they were briefly informed about the purpose of the study and verbal consent was obtained from students willing to participate. Data were collected via questionnaire form prepared by researcher based on literature information. A total of 20 questions were involved in questionnaire form to determine demographic characteristics of students, their states of experiencing the dysmenorrhoea, and their practices to cope with dysmenorrhoea. Questionnaire form developed by researcher was distributed to students, accepting to participate the study, in the class environment and they were asked to fill out it. Data were showed via mean and frequency distribution and assessed by chi-square significance test.

Results

Examining socio-demographic characteristics of students participating into study; 72.3 % of students were in the age group of 20-24 years, 27.7 % were 4th-year students, 74.2 % had first menarche between 12-14 years old, and 67.7 % had mean menstruation period of 3-6 days. It was determined that menstruation period of 58.7% of students was once in 28-33 days, 76.1 % were informed about menstruation before menarche, and mothers were in the first place among the information sources with the rate of 43.7 % . While 56.1% indicated that they were having negative feelings (fear, shame, panic, astonishment, etc.) about menarche, 41.3 % stated that their daily activities were affected during menstruation.

Table 1 illustrates students' states of experiencing the dysmenorrhoea and distribution of some features regarding dysmenorrhoea. Examining their states of experiencing the dysmenorrhoea; totally 93% of girls had dysmenorrhoea as 46.5% in every cycle, and 46.5% occasionally and 7% did not have. When beginning time of dysmenorrhoea complaints of students having dysmenorrhoea was investigated, it was determined that complaints started with menstruation in 34% of students, 2-3 days before menstruation in 31.3 % , and 1-2 hours before menstruation in 29.2%. Examining duration of dysmenorrhoea complaints of students; 48.6% had these complaints only in the first day of menstruation, 36.8% in first two day of menstruation, and 6.3 % had them throughout menstruation. 69.4% of students with dysmenorrhoea complaint had no medical aid. Family members of 56.1% had dysmenorrhoea problem; while sisters were in the first place with the rate of 59.8%, mothers were in the second place with the rate of 27.6% in family members with dysmenorrhoea problem.

Table 1. Distribution of Some Characteristics of Students Regarding Dysmenorrhoea

Experiencing Dysmenorrhoea (n=155)	Number	%
In every menstrual cycle	72	46.5
Occasionally	72	46.5
No	11	7.0
Beginning Time of Dysmenorrhoea (n=144)		
1-2 hours before menstruation	42	29.2
2-3 days before menstruation	45	31.3
Together with menstruation	49	34.0
2 nd -3 rd day of menstruation	8	5.6
Duration of Dysmenorrhoea (n=144)		
Ends 1-2 hours after menstruation	12	8.3
On 1 st day of menstruation	70	48.6
In first two days of menstruation	53	36.8
Throughout menstruation	9	6.3
Medical Aid (n=144)		
Having	44	30.6
Not having	100	69.4
Dysmenorrhoea Problem in Family (n=155)		
Existing	87	56.1
Not existing	68	43.9
The person with Dysmenorrhoea in Family (n=87)		
Mother	24	27.6
Sister	52	59.8
Aunt	11	12.6

Table 2 illustrates pre-menstrual complaints of students included within the study. 45.2% had always low back pain, 39.4% had always leg pain, 45.8% had always stomach ache, 42.6% had always nervousness, 36.8% had always urinating, 40.6% had always breast swelling/pain, 37.4% had always increased appetite, and 46.5% had always dysmenorrhoea complaints. While 43.9% had occasionally fatigue, 46.5% had occasionally pustulation on their face/skin, and 46.5% had dysmenorrhoea complaints occasionally, 43.2% had never

nausea, 60% had never vomiting, 41.3% had never headache, 41.3% had never diarrhoea, and 52.9% of students had never edema complaints. Results of our study showed that almost half of the students always had low back pain, stomach-ache, nervousness, breast swelling/pain, and dysmenorrhoea problems in pre-menstrual period.

Table 2. Distribution of Students in Terms of Experiencing Pre-menstrual Complaints (n=155)

Pre-menstrual Complaints	Always		Occasionally		Never	
	Number		Number		Number	
	%		%		%	
Nausea	31	20.0	57	36.8	67	43.2
Vomiting	16	10.3	46	29.7	93	60.0
Headache	35	22.6	56	36.1	64	41.3
Low back pain	70	45.2	64	41.3	21	13.5
Leg pain	61	39.4	54	34.8	40	25.8
Stomach ache	71	45.8	53	34.2	31	20.0
Diarrhoea	35	22.6	56	36.1	64	41.3
Nervousness	66	42.6	62	40.0	27	17.4
Fatigue	64	41.3	68	43.9	23	14.8
Thamuria	57	36.8	52	33.5	46	29.7
Breast swelling/pain	63	40.6	57	36.8	35	22.6
Edema	31	20.0	42	27.1	82	52.9
Pustulation on face/skin	58	37.4	72	46.5	25	16.1
Increased appetite	58	37.4	48	31.0	49	31.6
Dysmenorrhoea	72	46.5	72	46.5	11	7.0

Table 3 illustrates distribution of problems experienced during dysmenorrhoea and practices for preventing them. It was observed that with the rate of 78.5%, stomach ache and low back pain were in the first place between complaints of students with dysmenorrhoea, which was followed by fatigue (75.7%), nervousness (75.0%), concentration impairment (69.4%), leg pain (65.3%), thamuria (63.2%), headache (56.9%), nausea and diarrhoea (50.0%), and vomiting (34.7%). Considering distribution of practices done by students in order to prevent dysmenorrhoea; lying back for a rest was in the first place with the rate of

88.25, which was followed by taking a hot shower on foot (68.1%), taking pain killer (62.5%), taking for a walk (59.7%), listening to music (55.6%), doing exercise (45.1%), hot application to stomach (43.8%), changing diet (39.6%), having a sedentary bath (23.6%), and taking oral contraceptive (20.1%).

Table 3. Distribution of Problems Experienced During Dysmenorrhoea and Practices for Preventing Them

Complaint *	Number	%
Stomach ache	113	78.5
Low back pain	113	78.5
Fatigue	109	75.7
Nervousness	108	75.0
Concentration impairment	100	69.4
Leg pain	94	65.3
Thamuria	91	63.2
Head ache	82	56.9
Diarrhoea	72	50.0
Nausea	72	50.0
Vomiting	50	34.7
Practice*	Number	%
Lying back for a rest	127	88.2
Taking shower on foot	98	68.1
Taking pain killer	90	62.5
Taking for a walk	86	59.7
Listening to music	80	55.6
Doing exercise	65	45.1
Hot application to stomach	63	43.8
Changing diet	57	39.6
Having a sedentary bath	34	23.6
Taking oral contraceptive	29	20.1

* Percentages were calculated using n, since more than one option was marked

Table 4 illustrates distribution of answers given by students, included within study, to questions aimed at practices done in case of dysmenorrhoea. 47.7% of students indicated necessity of not using aspirin derivative analgesics in case of dysmenorrhoea, 64.5% stated

that it was a normal situation to have pain during menstruation, 54.8% stated that taking for a walk would helpful to decrease pain in menstruation, 45.2% declared that doing exercise for killing the pain of menstruation would decrease the pain, 61.9% stated that hot application to stomach for killing pain occurring during menstruation was not correct, and 64.5% stated that taking a shower for decreasing pain occurring during menstruation would decrease pain.

Table 4. Distribution of Answers Given by Students Regarding Questions about Practices During Dysmenorrhoea (n=155)

Questions	Yes		No		No idea	
	Number	%	Number	%	Number	%
Can aspirin derivative analgesics be used in order to decrease pain during menstruation?	58	37.4	74	47.7	23	14.8
Is it a normal situation to have pain during menstruation?	100	64.5	21	13.5	34	21.9
Is taking for a walk helpful in order to decrease the pain during menstruation?	85	54.8	31	20.0	39	25.2
Does doing exercise increase the pain during menstruation?	34	21.9	70	45.2	51	32.9
Is it correct to apply the hot to stomach for decreasing pain during menstruation?	37	23.9	96	61.9	22	14.2
Does taking a shower decrease the pain during menstruation?	100	64.5	24	15.5	31	20.0

Examining distribution of students' states of experiencing the dysmenorrhoea according to some characteristics in Table 5; 45.9% of students in the age group of 15-19 years had dysmenorrhoea in every menstrual cycle, 51.4% had dysmenorrhoea occasionally and 97.3% in total had dysmenorrhoea. Examining students in 20-24 year old group; 48.2% had in every cycle, 42.9% had occasionally, and totally 91.1% had dysmenorrhoea, and only 8.9% was determined not to have dysmenorrhoea. While 16.7% of students that were 25 years old and older had dysmenorrhoea in every cycle, 83.3% had dysmenorrhoea occasionally. The

statistical analysis revealed that difference between groups in terms of having dysmenorrhoea according to age groups was insignificant ($p>0.05$).

Examining distribution of students in terms of having dysmenorrhoea according to the classes they were attending, it was found out that totally 94.8% of first-year students, 90.5% of second-year students, 100% of third year students, and 88.4% of fourth-year students had dysmenorrhoea. The statistical analysis revealed that difference between students in terms of having dysmenorrhoea according to the classes they were attending was insignificant ($p>0.05$).

Examining distribution of students in terms of having dysmenorrhoea according to age of menarche, it was determined that while 50% of students with age of menarche between 9-11 years had dysmenorrhoea in every menstruation, 50% had occasionally. 43.5% of students with age of menarche of 12-14 years had dysmenorrhoea in every menstruation, 50.4% had occasionally and totally 93.9% had dysmenorrhoea, and 6.1% had no dysmenorrhoea. 84.6% of students with age of menarche of 15 years and above had dysmenorrhoea. Difference between groups in terms of having dysmenorrhoea according to the age of menarche was statistically insignificant ($p>0.05$).

Examining students in terms of having dysmenorrhoea regarding obtaining information about menstruation before menarche, it was determined that 47.5% of students obtaining information had always dysmenorrhoea, 45.8% had occasionally, and totally 93.3% had dysmenorrhoea and 91.8% of students not obtaining information had dysmenorrhoea. In the analysis performed, difference between groups in terms of having dysmenorrhoea as regards obtaining information in the period before menstruation was statistically insignificant ($p>0.05$).

Examining distribution of practices done by students in order to cope with dysmenorrhoea regarding obtaining information before menstruation; 87.3% of students obtaining information and 86.5% of students obtaining no information were determined to lie back for a rest. Difference between groups was found statistically significant in terms of lying back for a rest to cope with dysmenorrhoea regarding obtaining information before menstruation ($p<0.05$). However, difference between groups was statistically insignificant in terms of applying hot to the abdomen, doing exercise, listening to music, changing diet, taking a hot shower on foot, and using analgesic in order to cope with dysmenorrhoea regarding their situation of obtaining information before menstruation ($p>0.05$).

Examining students in terms of having dysmenorrhoea according to whether family members of students have dysmenorrhoea problem or not; all of students having family

member with and without dysmenorrhoea problem had dysmenorrhoea. Difference between groups was statistically insignificant in terms of having dysmenorrhoea regarding having family member with dysmenorrhoea problem ($p>0.05$)

Table 5. Dysmenorrhoea Situations of Students in Terms of Some Characteristics

Characteristics	Having Dysmenorrhoea						Total	Sig. Test	
	In Every Menstruation		Occasionally		Not Having				
	Number	%	Number	%	Number	%			
Age Group									
15-19	17	45.9	19	51.4	1	2.7	37	100	$X^2=5.445$
20-24	54	48.2	48	42.9	10	8.9	112	100	$P=0.245$
25 and older	1	16.7	5	83.3	--	--	6	100	
The class the student attended at									
1st Year	16	41.0	21	53.8	2	5.1	39	100	$X^2=5.824$
2nd Year	21	50.0	17	40.5	4	9.5	42	100	$P=0.443$
3rd Year	17	54.8	14	45.2	--	--	31	100	
4th Year	18	41.9	20	46.5	5	11.6	43	100	
Age of Menarche									
9-11	7	50.0	7	50.0	--	--	14	100	$X^2=7.205$
12-14	50	43.5	58	50.4	7	6.1	115	100	$P=0.125$
15 and older	15	57.7	7	26.9	4	15.4	26	100	
Menstruation Info									
Obtaining	56	47.5	54	45.8	8	6.8	118	100	$X^2=0.228$
Not obtaining	16	43.2	18	48.6	3	8.1	37	100	$P=0.892$
Family with History of Dysmenorrhoea									
Having	45	55.6	36	44.4	--	--	81	100	$X^2=2.286$
Not Having	27	42.9	36	57.1	--	--	63	100	$P=0.131$

Discussion

It was determined that age of menarche of a great majority of students participating into the study was between 12-14 years, menstruation period was 3-6 days, mean menstrual cycle was 28-33 days and it was within normal range. In the study conducted by Çıtak and Terzioğlu (2002), menarche age of 93.4% of students was found between 11-15 years (2). Erenel and Şentürk (2007) determined in their study that menarche age of a great majority of students was between 12-14 years, menstruation period was 3-6 days, and mean menstrual

cycle was 28-33 days and it was within normal range (10). Results similar to result of our study were obtained in other studies.

It was found in our study that 76.1% of students obtained information about menstruation before menarche, and mothers were in the first place among the sources of information with the rate of 43.7%. 56.1 of students stated that they had negative feelings (fear, shame, panic, astonishment, etc.) about menarche and 41.3% stated that their daily activities were affected during menstruation. In the study of Taşçı (2006), it was similarly found that 90.2% of students obtained information about menstruation before, 53.3% obtained this information from their mothers, 33.6% had negative reaction to menarche, and daily activities of 9% only were not affected during menstruation. In their study, Bölükbaş et al. (2003) determine that 67.9% of students obtained information before menstruation, and the family was in the first place as source of information (12). It could be asserted that results of the study were similar to those of our study, and students generally obtain information from family members before menstruation.

As a consequence of our study, a great number of students (93%) had dysmenorrhoea (Table 1). Çıtak and Terzioğlu (2002) determined that 87.5% of students had dysmenorrhoea, Erenel and Şentürk (2007) determined this rate as 86.9%, Kocaöz et al (2007) determined as 89.2%, and Kısa et al. (2012) determined as 80.1% (2,10,13,14). It could be asserted that these results were in line with those of our study and dysmenorrhoea is a common reproductive health problem among adolescence.

When beginning time of dysmenorrhoea complaints in students having dysmenorrhoea was investigated, it was stated that complaints started together with menstruation in 34% of students, 2-3 days before menstruation in 31.3%, and 1-2 hours before menstruation in 29.2% (Table 1). Erenel and Şentürk (2007) found in their study that the dysmenorrhoea started a few hours before menstruation in 26.3% of students, during menstruation in 38.4%, and two-three days before menstruation in 29.3% (10). Kocaöz et al. (2007) determined in their study that dysmenorrhoea started a few hours before menstruation in 19.8% of students, a few days before in 15.5%, and during menstruation in 45.7% (13). These results support results of the study.

Dysmenorrhoea is not reported to be an inherited disorder in literature (6). It was found in our study that family members of 56.1% of students had dysmenorrhoea problem, sister was in the first place with the rate of 59.8% in their family with dysmenorrhoea, and mother was in the second place with the rate of 27.6% (Table 1). In the study conducted by Çıtak and Terzioğlu (2002), dysmenorrhoea complaints were determined in first degree

relatives (mother, aunt, sisters) in family of 57.9%of students (2). It could be asserted that this result was similar to findings of our study, and genetic factors were not effective in dysmenorrhoea.

Students included within the study stated that 45.2% had low back pain, 39.4% had leg pain, 45.8% had stomach ache, 42.6% had nervousness, 36.8% had thrombocytopenia, 40.6% had breast swelling/pain, 37.4% had increased appetite, and 46.5% had dysmenorrhoea complaints *every time*. Students stated that 43.9% had fatigue, 46.5% had pustulation on their face/skin, and 46.5% had dysmenorrhoea complaints *occasionally*; additionally, 43.2% had nausea, 60% had vomiting, 41.3% had headache, 41.3% had diarrhoea, 52.9% had edema *never* (Table 2). Results of our study showed that almost half of the students always had low back pain, stomach ache, nervousness, breast swelling/pain, problems of dysmenorrhoea during pre-menstrual period. In study of Yeşiltepe and Şahin (2004) it was found that stomach ache and inguinal pain, pustulation, fatigue, headache complaints were widely seen in pre-menstrual period (1). In study of Kırca et al. (2012) it was indicated that while stomach ache and inguinal pain (67.9%) were in the first place in terms of physical problems during pre-menstrual period, nervousness-anger (63.7%) was in the first place in terms of mental problems during pre-menstrual period (15). These results were similar to results of the study.

Low back pain and stomach ache were experienced mostly during dysmenorrhoea (6). As a result of our study, stomach ache and low back pain were determined to be in the first place with the rate of 78.5% between students having dysmenorrhoea (Table 3). Similar results were obtained in studies conducted in order to determine complaints experienced during dysmenorrhoea. In their study, it was found by Kocaöz et. al. (2007), 58.6% of students had stomach ache, and 53.4% had back pain (13). Oskay and Şahin (2004) determined that stomach ache with the rate of 63.4% was in the first place among the menstruation complaints of young girls (9). Çıtak and Terzioğlu (2002) pointed out that 78.8% of students had low back pain, 68.4% had stomach ache, 63.6% had nervousness, and 55.2% experienced fatigue (2). These results support results of the study.

Lying back for a rest which is not an effective method was in the first place (88.2%) among the methods that students in our study preferred in order to cope with the pain. Additionally, effective practices such as listening to music, doing exercise-walking, taking a hot shower, hot application to stomach were found to be performed less (Table 3). The study of Erenel and Şentürk (2007), and the study of Kocaöz et al. (2007) revealed results similar to those of our study, students were determined to prefer lying back for a rest in order to cope with pain (10,13). In study of Oskay and Şahin (2004), it was determined that practices to

cope with pain were appointed as taking pain killer (59.5%), continuous resting (30.8%) and massage to stomach and low back (24.7%) (9). It could be said that these results were parallel to results of the study, and students perform ineffective practices for preventing dysmenorrhoea.

It was reported that 47.7% of students included in study stated that aspirin derivative analgesics should not used in case of dysmenorrhoea, 64.5% stated that having pain during menstruation was a normal situation, 54.8% indicated that taking for a walk would help to decrease the pain in menstruation, 45.2% indicated that doing exercise to relieve menstruation pain would decrease the pain, 61.9% stated that it was not correct to apply hot to stomach for decreasing pain during menstruation, and 64.5% stated that taking a shower for decreasing pain during menstruation would decrease the pain (Table 4). In study of Taşçı (2006) it was reported that 60.7% of students stated that aspirin derivative analgesics should not be used in case of dysmenorrhoea, 77.8% stated that it was normal to have pain during menstruation, 65.6% indicated that doing exercise to kill the pain would decrease the pain, and 44.3% stated that it was not correct to apply hot to stomach for relieving the pain during menstruation (11). In study of Yeşiltepe and Şahin (2004), while 59.5% of students stated that use of analgesic could be effective for killing the pain, 24.7% stated that doing massage to low back and stomach could be effective for killing the pain (1). These results support results of the study.

It was pointed out that dysmenorrhoea appears after ordering of ovulation in the first two years following menarche and increases up to mid twenties. In terms of chronological age; while severity of dysmenorrhoea increased between 14-20 years, recovery was observed about 25 (16,17). As a result of our study, it was found out age groups of students and class they were attending, were not effective on having dysmenorrhoea, and dysmenorrhoea complaints were high in every age groups and every years ($p>0.05$). Similarly, in the study conducted by Kocaöz et. al. (2007) it was determined that age of students did not have an effect on having dysmenorrhoea (13). On the other hand, Erenel and Şentürk (2007) stated that students having dysmenorrhoea at most were in the age group of 16-17 years (10). The fact that sample groups were different could be effective in dissimilarity of study results.

It was reported in literature that age of menarche had an effect on having dysmenorrhoea, and those with earlier age of menarche had more dysmenorrhoea (6). On the other hand, difference between menarche age of students and their state of having dysmenorrhoea was insignificant in our study ($p>0.05$). The study conducted by Erenel and Şentürk (2007) and the study conducted by Kocaöz et al., revealed that first menstruation age did not affect having dysmenorrhoea (10,13). However, Çıtak and Terzioğlu (2002) stated

that severity of dysmenorrhoea was high for those with earlier menarche age (2). Most of the students (74.2%) in our study had a menarche age in normal range so it could be thought that their menarche age did not affect having dysmenorrhoea.

It was determined that obtaining information before menstruation for students participating into study did not affect having dysmenorrhoea and methods they used in order to cope with dysmenorrhoea except for lying back for a rest ($p>0.05$). In study of Erenel and Şentürk (2007), it was found that students' obtaining information before menstruation did not affect having dysmenorrhoea and methods they used in order to cope with dysmenorrhoea except for applying hot to stomach (10). It was determined in the study that 76.1% of students obtained information about menstruation before menarche, and mother with the rate of 43.7% was in the first place among the sources of information. However, it could be thought that information given by family members was imperfect and insufficient, depending that ineffective ones were in the first place among the practices done by students for preventing dysmenorrhoea and there was no difference between those obtaining information and no information to cope with dysmenorrhoea except for lying back for a rest.

All of students with family members having and not having dysmenorrhoea problem were found to have dysmenorrhoea in the result of the study. Difference between groups was statistically insignificant in terms of having dysmenorrhoea with respect to have dysmenorrhoea problem in the family ($p>0.05$). Erenel and Şentürk (2007) found in their study that all of students having family with dysmenorrhoea problem had dysmenorrhoea but nonetheless very few students without dysmenorrhoea in their family had dysmenorrhoea. Kısa et al. determined in their study (2012) that one third of students' mothers, and more than half of students themselves had pre-menstrual complaints. The studies conducted demonstrated that rate of having PMS was higher for students stated that their mothers had premenstrual complaints (18-20). Studies indicating that genetic factors were related to PMS do not support result of this study (21-22).

Conclusion and Recommendations

It was determined that students had premenstrual symptoms and dysmenorrhoea, and did not have sufficient information about the practices for the problems they experienced, and did not use efficient coping methods. In accordance with the results obtained from the study, following recommendations are made;

*Paying attention to education of mothers about reproductive health and sexual health, enabling mothers to be informed about menstruation and dysmenorrhoea within the scope of

reproductive health by collaborating with non-governmental organizations and media in line with this purpose,

*Making regulations for students ,having education in a department related to health, about giving subjects they need in the curriculum by starting earlier years, in order to cope with primarily their own problems,

* School health nurses and healthcare professionals' supporting students as trainers and advisors in order to experience less the negative effects of PMS and dysmenorrhoea.

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